WO 2004/094570 PCT/CN2004/000391

## Claims

- 1. A fuel oil characterized in that said fuel oil contains substantially no granules greater than 10 nm.
- 2. A fuel oil according to claim 1, characterized in that said fuel oil contains substantially no granules greater than 5 nm.
- 3. A fuel oil according to claim 2, characterized in that said fuel oil contains substantially no granules greater than 3 nm.
- 4. A fuel oil according to any of claims 1-3, characterized in that said fuel oil is gasoline.
- 5. A fuel oil according to any of claims 1-3, characterized in that said fuel oil is diesel oil.
- 6. A fuel oil according to any of claims 1-3, characterized in that said fuel oil is kerosene.
- 7. A fuel oil according to any of claims 1-3, characterized in that said fuel oil is heavy oil.
- 8. A fuel oil according to any of claims 1-3, characterized in that said fuel oil is bio-diesel.
- 9. A method for preparing a fuel oil of any of claims 1-8, comprising a step of passing a conventional fluid fuel oil with big clusters of molecules through a magnetic field having a air gap magnetic field intensity of at least 8000 Gauss and a magnetic field gradient of at least 1.5 tesla/cm in a direction intersecting with the magnetic force lines.
- 10. A method according to claim 9, characterized in that said magnetic field has a air gap magnetic field intensity of at least 10,000 Gauss and a magnetic field gradient at least 1.8 tesla/cm.
- 11. A method according to claims 9 or 10, characterized in that said magnetic field is formed by two N poles or two S poles of two permanent magnets with a magnetic intensity greater than 5000 Gauss and an intrinsic coersivity greater than 18000 Oersted, the same poles of the two permanent magnets being placed opposite to each other, leaving a gap of less than 0.5mm.
- 12. A method according to claim 9 or claim 10, characterized in that said magnetic field is an alternating current magnetic field.